ATEN Control System

VK2100 + VK6000 + ATEN Control System App

The **ATEN Control System**, incorporating the **VK2100 (ATEN Controller),** the **VK6000 (ATEN Configurator)** and the **ATEN Control System App** is a standard Ethernet-based management system that connects all hardware devices in a room or large facility to provide centralized control of devices directly and effortlessly via an iPad. The **VK2100** works as the main controller that provides great connectivity to all sorts of hardware devices commonly seen in a room. After connecting the hardware, the **VK6000** software allows customizable device configuration via creation of a simple system project in 4 easy steps. By connecting to the VK2100 via Ethernet, the **ATEN Control System App** empowers you with the mobility to control different hardware devices in different rooms whenever and however you like.

The **VK2100** can easily deploy into an existing installation and integrate seamlessly with ATEN VanCryst pro-A/V products and a complete line of hardware devices, including A/V equipments, lighting systems, air conditioning, motion sensors, power switches and much more. The **VK2100** serves as a centralized platform where hardware devices are converged to be monitored, managed and controlled directly via a tailored-made GUI from an iPad.

The **VK6000** features a quick setup that facilitates the configuration of hardware control and device operations in 4 easy steps via an intuitive GUI. Through Ethernet connection, the **ATEN Control System App** enables you to import and update viewer profiles from the VK2100 via point-n-tap user interface. Each viewer profile provides a customized control GUI that grants you quick access to target hardware device. Use of any profile is further protected with password authentication to secure system access.

The **ATEN Control System** is perfectly applicable in meeting rooms, conference centers, boardrooms, classrooms or any room that requires collaboration of a variety of hardware devices through a streamlined management with optimum efficiency and performance.

Front view

Rear view

Features

VK2100 (Hardware Controller)

- Supports various connecting interfaces, including:
  - 6 x Serial port;
  - 4 x IR/Serial port;
  - 4 x Relay channel;
  - 4 x I/O channel;
  - 1 x Ethernet port
- 4 x DC output for power supply connections
- 1 x USB port for easy profile upload
- IR Learning function for adding IR device drivers
- Easy system settings via the web GUI
- LED indication for hardware status and active messages
- SSH tool to monitor the input and output signals of the controller
- Rack-mountable

VK6000 (Configurator Software)

- Simple profile setup in 4 easy configuration steps via intuitive GUII
- Customizable GUI design and control operations for the iPad
- Built-in Database Generator for device driver setup and overall device management
- Built-in ATEN Library comprising 10,000+ device drivers and complete ATEN VanCryst product drivers
- Supports Telnet and PJLink protocols for controlling LAN devices over a network
- Test tool to verify commands in action before uploading the profile to the VK2100
- Simulator to simulate and review the customized GUI before uploading the profile to the VK2100

ATEN Control System App

- Allows administrators to centrally control multiple rooms via different profiles on an single iPad
- Restricted user access to profiles via password authentication
- Synchronization of system controls amongst multiple iPads

Installation Setup

Connect hardware

Install software

Download app

Highlights

Expandable and Manageable Device Library	The **ATEN Library** is comprised of 10,000+ device drivers along with a complete line of ATEN VanCryst product drivers. This extensive portfolio of driver resources is built in the system upon the VK6000 installation which makes hardware installation as easy as plug-n-play. This device database can be expanded by adding new devices to the **Database Generator** which comes in handy when the system fails to locate a specific driver from the **ATEN Library**. Furthermore, device management is simplified and centralized using **My Library** which consolidates device information in an organized list for faster hardware setup in projects. This expandable and manageable device database is beneficial and time-efficient as the scope and size of installations grow.
Simplified Setup via Intuitive GUI Design	The **ATEN Configurator** (VK6000 software) offers an intuitive and streamlined GUI to simplify a complicated hardware setup process in 4 easy steps: create project > select device > configure viewer profile > upload profile. Operations for any room can be customized in a profile that includes a programmable GUI designed for the iPad model's screen size, signifying "what you see is what you get", as well as actions and commands that correspond to the control buttons and icons added to the GUI. All control operations can be examined beforehand via Simulator and a test tool to verify how each configuration will respond and appear on the iPad, avoiding the need for re-configuration after the profile has been imported to the iPad for use. This straightforward and streamlined GUI is helpful in boosting system setup without repetitive checks to get system administrators acclimated and start device management effortlessly.
System Facilitation with Multiple Controller/ Profile/iPad Control	While plotting your installation, system control can start with one room and scale up to multiple rooms in the same area or across regions. From an iPad, toggling between profiles imported from the controller (VK2100) facilitates system control of different rooms with simple point-n-tap operations. Meanwhile, multiple iPads can be authorized with control over the same room simultaneously, depending on the system license. On the other hand, user access to any profile on the iPad can be restricted with password authentication to enhance system security. This versatile system framework is beneficial as system control can respond promptly and flexibly to any changes made, without suffering from unexpected service interruptions.

Specification

<table>
<tr><th>Function</th><th>VK2100</th></tr>
<tr><td colspan="2">Interface</td></tr>
<tr><td>Serial</td><td>• 4 x Programmable Bi-directional RS-232/422/485 Port
(4 x DB9 Male Connector, configurable via pin assignments);
– Baud Rate: 300 to 115200 (default: 9600);
– Data Bit: 8 (default) or 7;
– Stop Bit: 1 (default) or 2;
– Parity: None (default), Even or Odd;
– Flow Control: None (default) RTS/CTS
Pin Assignments
<table>
<tr><th>RS232</th><th>RS422</th><th>RS485</th></tr>
<tr><td>Pin2: RX</td><td>Pin1: RX-</td><td>Pin3: D+</td></tr>
<tr><td>Pin3: TX</td><td>Pin2: RX+</td><td>Pin4: D-</td></tr>
<tr><td>Pin5: GND</td><td>Pin3: TX+</td><td></td></tr>
<tr><td>Pin7: RTS</td><td>Pin4: TX-</td><td></td></tr>
<tr><td>Pin8: CTS</td><td>Pin5: GND</td><td></td></tr>
</table>
• 2 x Bi-directional RS-232 Port
(2 x 3-Pole Terminal Block Connector);
– Baud Rate: 300 to 115200 (default: 9600);
– Data Bit: 8 (default) or 7;
– Stop Bit: 1 (default) or 2;
– Parity: None (default), even or odd</td></tr>
<tr><td>IR/Serial</td><td>• 4 x Programmable IR / Uni-directional RS-232 Port
(2 x 4-Pole Terminal Block Connector);
IR: TTL level (0 to 5 V)
– Carrier Frequency: 10KHz~455KHz;
Serial: Uni-directional RS-232 (+ - 5 V)
– Baud Rate: 300 to 115200 (default: 9600);
– Data Bit: 8 (default) or 7;
– Stop Bit: 1 (default) or 2;
– Parity: None (default), Even or Odd</td></tr>
<tr><td>I/O</td><td>• 4 x Programmable Digital Input / Output Channel
(1 x 5-Pole Terminal Block Connector);
Digital Output:
250 mA sink from 12 VDC
Digital Input:
– VDC Mode
Input Voltage Range: 0 to 24 VDC;
Programmable Range: 1 to 24 VDC;
– Dry Contact Mode
Pull-up 2k ohms to + 12 VDC</td></tr>
<tr><td>Relay</td><td>• 4 x Relay Channel (2 x 4-Pole Terminal Block Connector);
• Normally open, isolated Relays;
• Contact Rating: Max 24 VDC, 2A</td></tr>
<tr><td>VDC</td><td>• 4 x 12 VDC Output Port (2 x 4-Pole Terminal Block Connector);
• Power Supply: 12 VDC, 2A Max (shared by 4 ports)</td></tr>
</table>

Function	VK2100
Ethernet	• 1 x RJ-45 Female, 10/100Base-T • Supported Protocol: ICMP, TCP/IP, DHCP, HTTPS, SSH • DHCP-enabled. The following default IP settings will be used if no IP is assigned within 30 seconds: IP: 192.168.0.60 Subnet Mask: 255.255.255.0 • Establishes VK2100 connection with the VK6000 (ATEN Configurator) and iPad (ATEN Control System App)
Switch	
Controller ID	1 x 16-segment Switch
Power	1 x On/Off Switch
IR Learning	1 x IR Receiver LED
Reset Button	1 x Semi-recessed Pushbutton
USB	1 x USB Type A
Power	
Consumption	40 Watt
I/P Rating	Internal Power: 100-240 VAC, 50-60 Hz
Environmental	
Operating Temperature	0 – 50°C
Storage Temperature	–20 – 60°C
Humidity	0 - 80% RH, Non-Condensing
Physical Properties	
Housing	Metal
Weight	2.64 kg
Dimensions (L x W x H)	43.72 x 16.32 x 4.40 cm

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